



SPX2242



Features

- HART™ digital communication
- Better than +/- 0.25% combined error
- 4 - 20 mA loop-powered output
- 0 - 250 to 0 - 30,000 psi
- Explosion Proof, Intrinsically Safe/ ATEX approved*
- Meets PED and CE requirements

Benefits

- Configurable via handheld
- Precise repeatable pressure measurements
- Output supplied directly to DCS or PLC
- Customer defined pressure ranges
- Approved for hazardous environments
- Meets new EC requirements

Description

The SPX2242 is a smart 4 - 20 mA pressure transmitter designed for use in hazardous locations. The SPX2242 is an all welded construction that features a 1/2-20 UNF thread for installation in standard transducer mounting holes. Optional thermocouple or RTD configurations are available to provide melt temperature. The SPX2242E has explosion proof approval for Class 1, Division I, Groups A, B, C & D. The explosion proof model employs a conduit fitting. The SPX2242S is approved for ATEX/ Intrinsically Safe II 1 G 100a Ex ia IIC, Zone 0 and 1. The ATEX/ Intrinsically safe models can be supplied with either a conduit fitting or a hermetically sealed 6 pin bendix connector.

Specifications

PERFORMANCE CHARACTERISTICS

Output: 4 - 20 mA, with optional HART™
Input Voltage: 16 - 36 Vdc (Standard)
 16 - 30 Vdc (ATEX/ Intrinsically Safe Applications)
Combined Error: +/- 0.25% FSO,
 +/- 0.5% FSO for ranges below 1,500 psi
 (Including Linearity, Repeatability & Hysteresis)
Repeatability: +/- 0.1% FSO
Rerangability: 3:1 Turndown
Over Pressure: 2 X FSO or 35,000 psi, whichever is less
Zero Balance Adjustment Range: -40% to +10%;
 -80% to +20% for <500 psi
Gain Span Adjustment Range: +/- 2% FSO maximum
Load Resistance: 500 Ω @ 26 Vdc 1000 Ω @ 36 Vdc

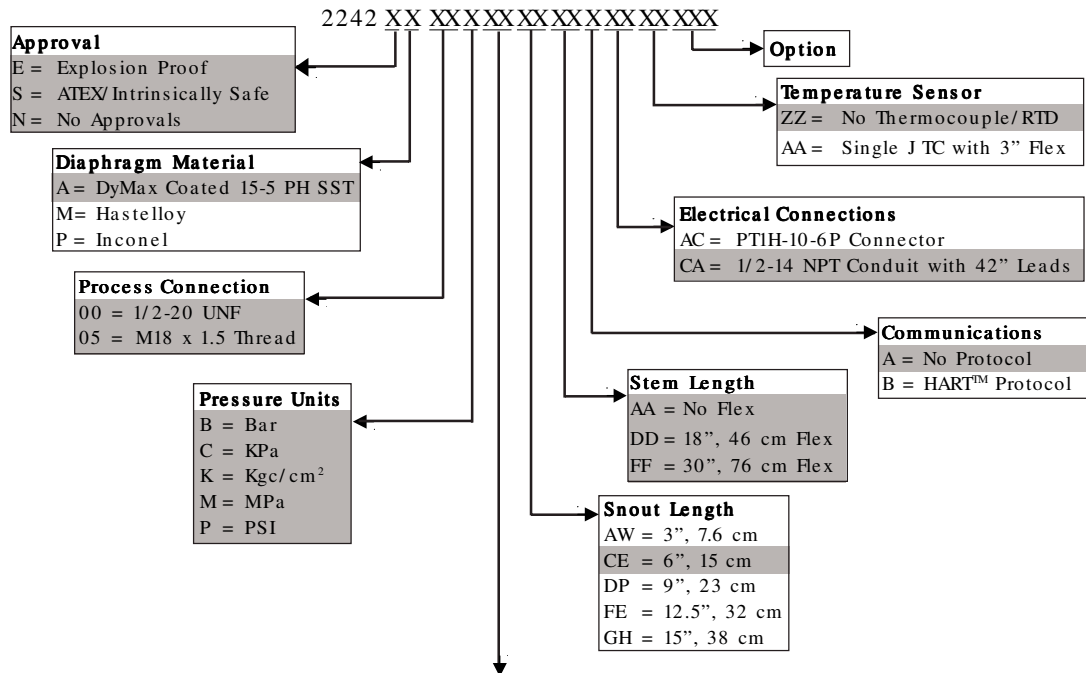
* Approvals pending

TEMPERATURE & MECHANICAL CHARACTERISTICS

Max Diaphragm Temperature: 750°F (400°C)
Zero Shift (due to temperature change):
 15 psi/ 100°F typical (27 psi/ 100°C)
Electronics Operating Temperature:
 -20° to 185°F (-29° to 85°C)
**Effects over Compensated Temperature Range of
 0° to 150°F (-18° to 65°C) - Zero & Span (each):**
 0.01% FS/ °F max (0.02% FS/ °C max)
Mounting Torque: 500 inch/ lbs. maximum
Standard Wetted Parts: DyMax™ coated 15-5 PHSS



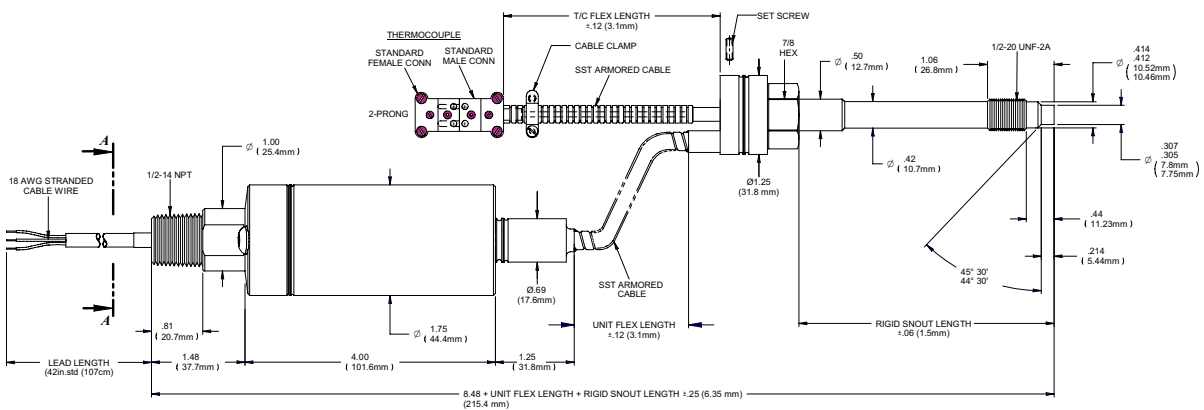
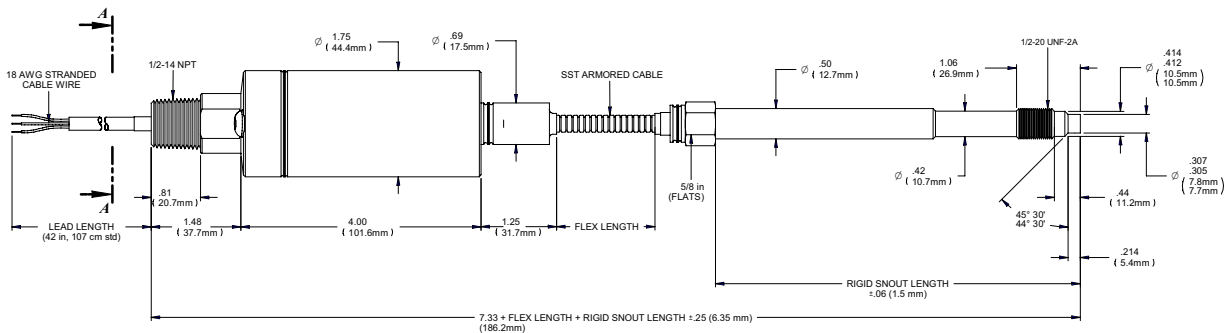
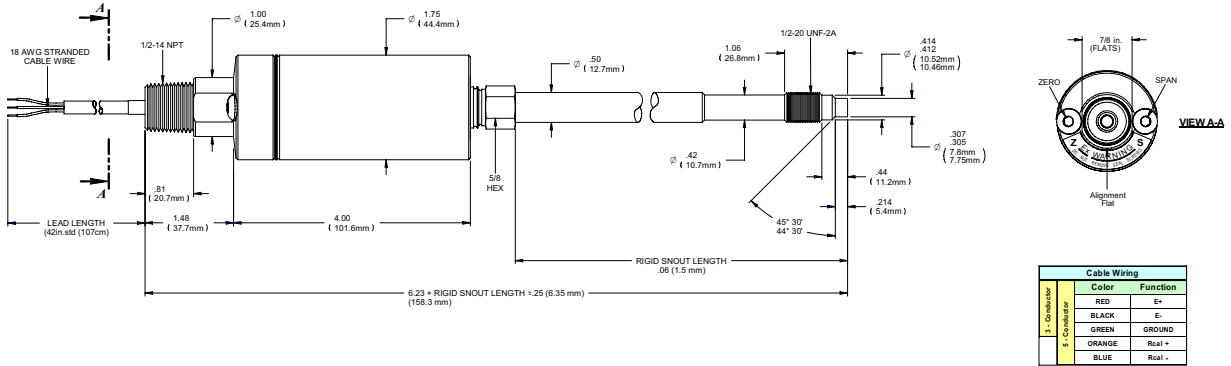
Ordering Guide



Pressure Range				
13*	= 250	psi	17.5	Bar 17.5 Kg/cm ² 1.75 MPa
14	= 500	psi	35	Bar 35 Kg/cm ² 3.5 MPa
15	= 750	psi	50	Bar 50 Kg/cm ² 5 MPa
16	= 1,000	psi	70	Bar 70 Kg/cm ² 7 MPa
17	= 1,500	psi	100	Bar 100 Kg/cm ² 10 MPa
20	= 3,000	psi	200	Bar 200 Kg/cm ² 20 MPa
21	= 5,000	psi	350	Bar 350 Kg/cm ² 35 MPa
22	= 7,500	psi	500	Bar 500 Kg/cm ² 50 MPa
23	= 10,000	psi	700	Bar 700 Kg/cm ² 70 MPa
24	= 15,000	psi	1000	Bar 1000 Kg/cm ² 100 MPa
25	= 20,000	psi	1400	Bar 1400 Kg/cm ² 140 MPa
27	= 30,000	psi	2000	Bar 2000 Kg/cm ² 200 MPa

* Available in M18 x 1.5 Thread only

Shaded sections refer to standard configurations. Accuracy may be affected if non-standard configurations are used. For additional options please consult factory.



All dimensions are in inches (mm).

03/04